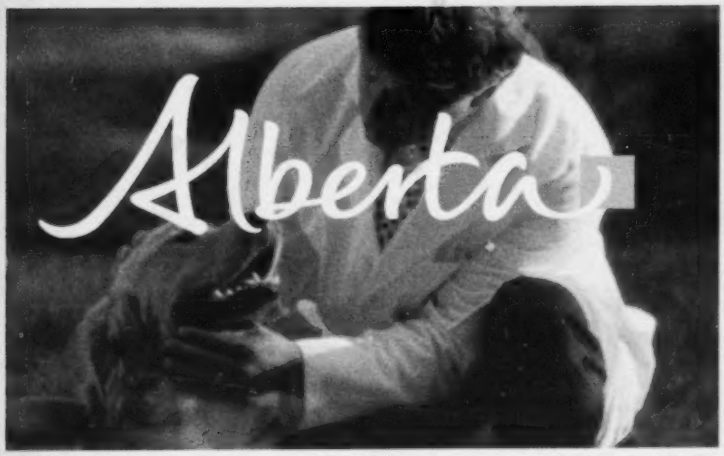


INDUSTRY PROFILES

Professional, Scientific and Technical Services Industry

July 2010

Government of Alberta
Employment and Immigration

Overview:

The Professional, Scientific and Technical Services industry[1] in Alberta includes enterprises that make knowledge and skills available to other organizations or to the public, often on a project basis. For example, they may provide:

- legal services and accounting and related services;
- architectural, engineering and related services;
- surveying and mapping services;
- graphic, industrial or computer systems design services;
- management, scientific and technical consulting services, research and development services;
- advertising, public relations or market research services;
- translation services; and
- veterinary services.

Section A: Business Environment
1. 2009 Employment and Unemployment Numbers and Rates
2. Industry Growth
3. Size of Businesses in Alberta and the Industry
Section B: Human Resources Profile
1. Occupational Information
2. Demographics: Age and Gender
3. Wages
Section C: Additional Information
1. Links to Selected Industry Associations
2. Link to Government Library Database

[1] North American Industry Classification System (NAICS) major group 54

Section A: Business Environment

1. 2009 Employment and Unemployment Numbers and Rates:

	Alberta	Professional, Scientific and Technical Services Industry
Number of employed	1,988,100	151,700
Percent employed in the industry		7.6%
Number of unemployed	139,700	7,800
Unemployment rate	6.6%	4.9%

Data Source: Labour Force Historical Review 2009, Statistics Canada

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics[2] or Statistics Canada[3] websites.

2. Industry Growth:

- Employment in the Professional, Scientific and Technical Services industry is expected to grow on average 5.7% annually from 2010 to 2013.
- Approximately 34,500 jobs will be created between 2010 and 2013. Employment is expected to increase to 186,200 by 2013.
- This industry is expected to provide 19.5% of all new jobs in Alberta between 2010 and 2013.

For more information, see the Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2009 – 2013, Industry Employment Outlook[4] online and the Alberta Learning Information Service (ALIS)[5] website's industry descriptions.

[2] See http://www.employment.alberta.ca/BI/67.html
[3] See http://www.statcan.gc.ca
[4] See http://www.employment.alberta.ca/documents/LMI/LMI-LMF_2009-13_cops.pdf
[5] See http://www.alis.alberta.ca

Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Professional, Scientific and Technical Services industry accounted for 5.5% of Alberta's Gross Domestic Product in 2009, up from 4.1% in 1999. This industry's share of Alberta's total employment increased from 6.6% in 1999 to 7.6% in 2009.

Employment in 2009 was 7.6% lower that its level in 2008. Over the last ten years, employment increased from 101,800 people in 1999 to 151,700 people in 2009.

The *Alberta Occupational Demand Outlook 2009-2013* projects labour demand growth in most occupations in the industry from 2010 to 2013.

3. Size of Businesses in Alberta and the Industry:

Establishment Size	Alberta Businesses		Professional, Scientific and Technical Services Businesses	
	Number of Employees	%*	Number of Employees	%*
Less than 20 employees	561,300	34.3%	32,200	33.2%
20 to 99 employees	582,500	35.6%	35,000	36.0%
100 to 500 employees	298,700	18.3%	20,600	21.2%
Over 500 employees	194,000	11.9%	9,300	9.6%

Data Source: Labour Force Historical Review 2009, Statistics Canada

* Percentages may not add up to 100 due to rounding.

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.

Section B: Human Resources Profile

1. Occupational Information:

Some examples of occupations in the Professional, Scientific and Technical Services industry include:

- accountant;
- architect;
- civil engineer;
- graphic designer; and
- lawyer.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles[6] website.

2. Demographics: Age and Gender:

According to the Labour Force Survey, the gender breakdown in the Professional, Scientific and Technical Services industry is as follows:

- women employed: 61,300 people, or 40.4%
- men employed: 90,400 people, or 59.6%

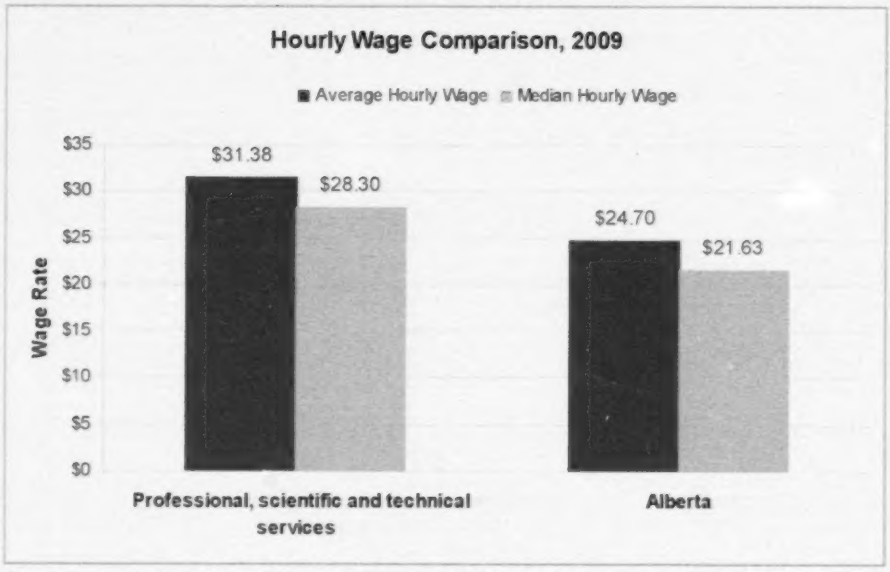
In Alberta, women accounted for 45.4% and men made up 54.6% of total employment.

Age Characteristics	Alberta Employees		Professional, Scientific and Technical Services Employees	
	Number	%	Number	%
15-24 years	316,400	15.9%	11,500	7.6%
25-54 years	1,356,400	68.2%	112,200	74.0%
55 years and over	315,300	15.9%	28,000	18.4%

Data Source: Labour Force Historical Review 2009, Statistics Canada

[6] See http://www.alis.alberta.ca/occinfo

3. Wages:



Data Source: Labour Force Historical Review 2009, Statistics Canada
Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Wage and Salary Information for Selected Occupations

Occupation	Average Hourly Wage			Average Annual Salary
	Starting Average	Overall Average	Top Average	
Lawyers and Quebec notaries	$ 30.85	$ 49.39	$ 73.72	$ 99,802
Electrical engineer	$ 25.49	$ 42.71	$ 68.41	$ 85,481
Graphic designer	$ 19.47	$ 24.47	$ 30.94	$ 49,241
Veterinarian	$ 33.21	$ 41.97	$ 50.69	$ 81,203

Data Source: 2009 Alberta Wage and Salary Survey

For more information on wages, refer to the WAGEinfo[7] webpage. For job descriptions, duties, required skills and education for specific occupations in the Professional, Scientific and Technical Services industry, visit the ALIS[8] website.

[7] See http://www.alis.alberta.ca/wageinfo
[8] See http://www.alis.alberta.ca

Section C: Additional Information

1. Links to Selected Industry Associations:

- Alberta Association of Architects
  (http://www.aaa.ab.ca)
- Alberta Innovates Technology Futures
  (http://www.albertainnovates.ca)
- Alberta Land Surveyors' Association
  (http://www.alsa.ab.ca)
- Association of Professional Engineers, Geologists and Geophysicists of Alberta
  (http://www.apegga.org)
- Certified General Accountants' Association of Alberta
  (http://www.cga-alberta.org)
- Chartered Accountants of Alberta
  (http://www.albertacas.ca)
- Economic Developers of Alberta
  (http://www.edaalberta.ca)
- Law Society of Alberta
  (http://www.lawsocietyalberta.com)

2. Link to Government Library Database:

http://www.servicelink.gov.ab.ca/libraries/workplace